

Water

76 parts by weight

B.S.

A small amount<sup>t</sup> of ammonia hydroxide solution was added to adjust the pH to 11.

5 A woven cotton fabric (cotton Poplin), a plain woven polyester fabric with textured yarns, and a plain woven 50/50 polyester/cotton fabric were separately impregnated with the above treatment solution, passing through nip rolls to get a wet pickup of about 60%. The impregnated fabrics were dried in a convection oven at 300°F for 3 minutes.

10 All those treated fabrics were printed with solid circles and squares of 3 primary colors (red, blue, yellow) and black using Hewlett Packard DeskJet 932C ink jet printer. All treated fabric showed very good sharpness at the edges and excellent color holdout. There was no evidence of ink feathering. The printed fabrics were then washed in a regular home washer using delicate cycle using Gentle Cycle Woolite neutral detergent following AATCC Standardization of Home Laundry Text Condition (Developed in 1984 by AATCC Committee RA88, and as revised in 1986, 1992, and 1995.). Fabrics were then dried in a regular home dryer at low heat for 20 minutes. Very little color loss was observed after the washing. No color bleeding or migration was observed. Color value (CIE L\*, a\* and b\* values) of each of the colors on the printed fabrics after one wash and five washes was measured using an X-Rite SP78 Spectrophotometer utilizing the QA Master software for Microsoft Windows Version 1.71 (both manufactured by X-Rite Inc., Grandville, MI). E versus the color printed on a piece of white paper was used to measure the degree of color loss. Wet crocking (AATCC test method 8-1996), and waterfastness (AATCC test method 107-1997) were also measured on each primary color on the fabric after one wash. The test results are summarized in Table 1 and Table 2.